

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Claim 1 (Currently amended): An X-ray unit device for the generation of short at least one X-ray beam pulses pulse, the device comprising:

with an X-ray tube (10) which has having a thermionic cathode (12) and an anode; (16), and

with an X-ray generator comprising which has a Marx generator first circuit (22, 20, 18) for the generation of a at least one high-voltage pulse which is applied to the anode (16) for the generation of the at least one X-ray pulse, and a simmer power supply unit by plus a second circuit (26) via which a low voltage is continuously applied to the anode (16) wherein the low voltage is which at the most is sufficient for the generation of low-energy X-radiation (30) and pre-heats the X-ray tube; (10),

wherein the characterized in that the first circuit is a Marx generator and the second circuit is a simmer power supply unit (26) and is also used as a voltage source (32) of the Marx generator.

Claim 2 (Currently amended): An apparatus Deviee for the inspection of objects, the apparatus comprising:

an X-ray tube having a thermionic cathode and an anode;

an X-ray generator comprising a Marx generator for generating at least one high-voltage pulse applied to the anode for the generation of at least one X-ray pulse, and a simmer power supply unit by which a low voltage is continuously applied to the anode, wherein the low voltage pre-heats the X-ray tube and is at most sufficient for the generation of low-energy X-radiation; with an X-ray unit (10) and

an imaging apparatus (44, 46) for generating an image of the object by means of the at least one X-ray pulse.(30), characterized in that the X-ray unit (10) is developed according to claim 1

Claims 3-5 (Canceled)

*Rule 126*  
Claim 4 (New): A method of generating an X-ray pulse comprising:

providing an X-ray tube having a thermionic cathode and an anode;  
preheating the X-ray tube by continuously applying a low voltage to the X-ray tube  
wherein the low voltage preheats the X-ray tube and is at most sufficient for the generation of  
low-energy X-radiation;  
generating at least one high voltage pulse; and  
applying the at least one high voltage pulse to the anode to generate at least one X-ray  
pulse.

7  
Claim 7 (New): The method of claim 4 wherein the at least one high voltage pulse is  
generated by a Marx generator.

8  
Claim 8 (New): The method of claim 4 wherein, a first circuit generates the at least one  
high voltage pulse, and wherein further, the X-ray tube is preheated by a second circuit that is  
the voltage source of the first circuit.

9  
Claim 9 (New): A method of inspecting objects comprising:  
providing an X-ray tube having a thermionic cathode and an anode;  
preheating the X-ray tube by continuously applying a low voltage to the X-ray tube  
wherein the low voltage preheats the X-ray tube and is at most sufficient for the generation of  
low-energy X-radiation;  
generating at least one high voltage pulse;  
applying the at least one high voltage pulse to the anode whereby at least one X-ray  
pulse is generated.  
passing the at least one X-ray pulse through an object; and  
generating an image based on the at least one X-ray pulse passing thru the object.

10  
Claim 10 (New): The method of claim 9 wherein the at least one high voltage pulse is  
generated by a Marx generator.

11  
Claim 11 (New): The method of claim 9 wherein, a first circuit generates the at least one  
high voltage pulse, and wherein further, the X-ray tube is preheated by a second circuit that is  
the voltage source of the first circuit.

Claim 10 (New): The method of claim 7 further comprising:  
transporting the object on a substantially horizontal plane of transport; and  
moving the object through the at least one X-ray pulse wherein the X-ray pulse has a  
predetermined direction.

Claim 11 (New): The method of claim 7, wherein the object is one of a plurality of  
containers being transported individually in succession in a row on a substantially horizontal  
plane of transport.

Claim 12 (New): The method of claim 7, wherein the at least one X-ray pulse passing  
through the object, strikes an X-ray image converter and generates an image therein that is  
recorded by a digital camera.